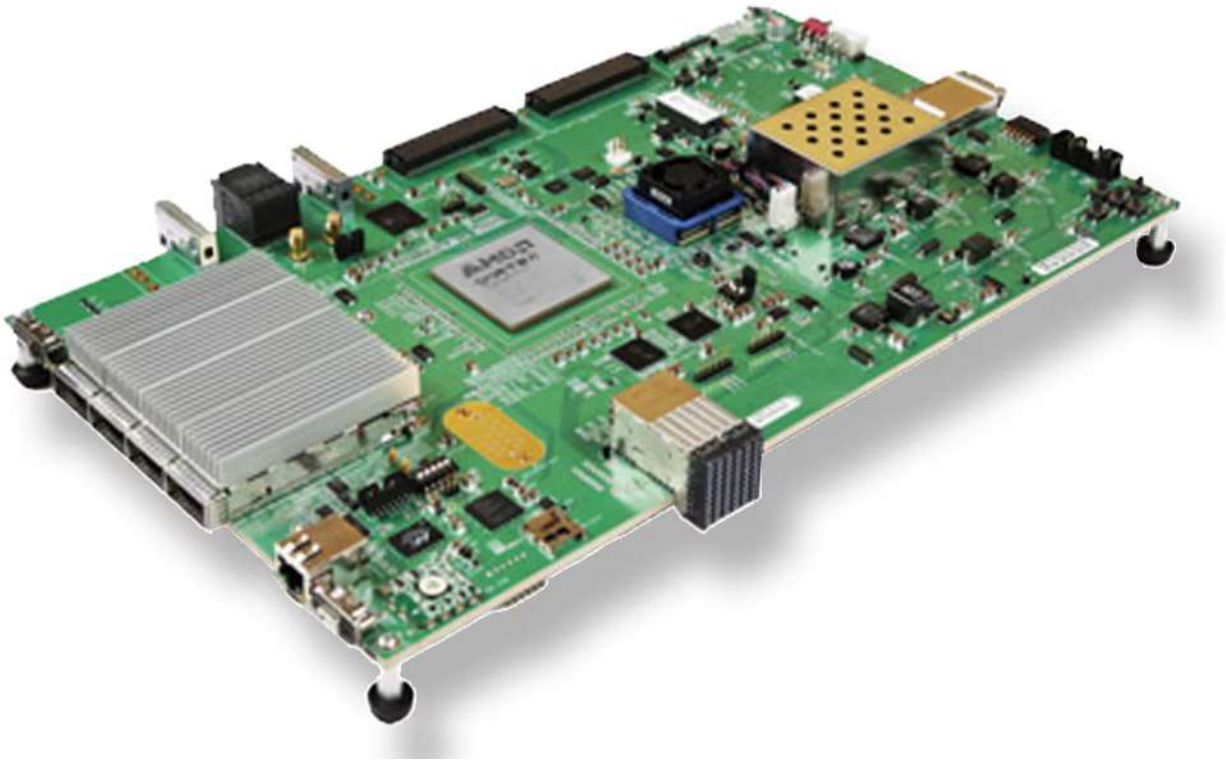


AMD Virtex™ UltraScale™ FPGA VCU110 Development Kit

The AMD Virtex™ UltraScale™ FPGA VCU110 Development Kit is the perfect development environment for evaluating the unprecedented levels of performance, system integration and bandwidth provided by Virtex UltraScale devices. This kit provides an ideal platform for developing systems requiring massive data throughput such as 400+ Gbps systems and 28 Gbps backplane applications.

Part Number: DK-U1-VCU110-G

Key Features & Benefits

4 CPF4 Optical Interfaces

28 Gbps Backplane Interface

20 GTY Interlaken Interface

2 FMC HPC Interfaces

2GB HMC Memory

1Gb RLDRAM 3 Memory

144-Mbit QDR II+ SRAM

Dual 512MB Quad-SPI flash memory

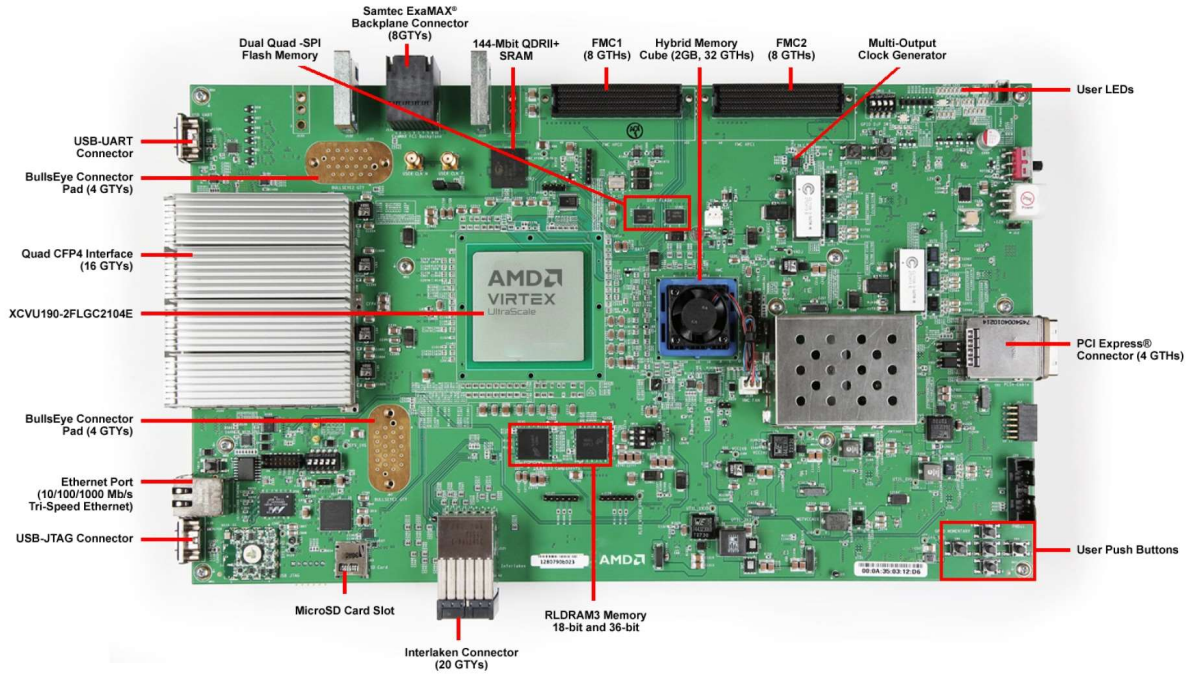
Featured AMD Devices

Featuring the ROHS compliant VCU110 kit including the XCVU190-2FLGC2104E FPGA

| | |
|---|---|
| System Logic Cells (K) | 2,350 |
| DSP Slices | 1,800 |
| Memory (Mb) | 132.9 |
| GTH 16.3 Gb/s Transceivers | 60 |
| GTY 30.5 Gb/s Transceivers | 60 |
| I/0 Pins | 702 |

Board Features

Featuring the VCU110 Development Board




Communication & Networking

- Quad 100G CFP4 Interface (16 GTYs)
- Tyco Backplane connector (8 GTYs)
- 20 Lane Interlaken connector (20 GTYs)
- PCI Express Gen3 x4 cable connector (4 GTHs)
- Dual BullsEye Connector pads (8 GTYs)
- Dual USB-to-UART Bridge with micro-USB connector 10/100/1000 Mbps Ethernet (RGMII)

Clocking

- SI5335A Quad Clock Generator
- Si570 IIC Programmable LVDS Clock Generator
- Multiple SI5328C Clock Multiplier and Jitter Attenuator
- User Clock inputs on BullsEye cables and discrete SMA connectors

Display

- User & Status LEDs

Expansion Connectors

- FMC HPC0 connector (8 GTHs)
- FMC HPC1 connector (8 GTHs)

- PMOD (2x6 0.1" Header)

**Configuration**

- Onboard JTAG configuration circuitry to enable configuration over USB
- JTAG header provided for use with AMD download cables such as the Platform Cable USB II
- 1 Gb Quad-SPI flash memory

**Memory**

- 2GB Hybrid Memory Cube (HMC) Serial Memory (32 GTHs)
- 144 Mb QDRII+ component memory interface
- 1152 Mb RLD3 component memory interface
- MicroSD Card slot

**Control & I/O**

- User Push Buttons (x5)
- User DIP Switch (4-position)

**Power**

- AC Power adapter (12V)

**Analog**

- PMBus connector for voltage and current monitoring through Maxim power controllers and GUI.